

# Visual Basic

**Overview:** Students will learn how to use Visual Basic 6.0 to develop Windows applications.

**Prerequisites:** *Windows 95: Introduction* or equivalent knowledge, and some programming experience.

## **Performance-based objectives**

- Identify and describe the purpose of various components of the Visual Basic programming environment.
- Build and run a small application.
- Use the code editing tools in the Code Editor window to write conditional statements and other code constructs.
- Isolate, identify, and correct logic, compile, and run-time errors in a Visual Basic application.
- Develop multiple-form applications.
- Declare variables and constants.
- Examine and discuss Sub and Function procedures, and pass arguments by value and by reference.
- Create application interfaces with standard and custom controls.
- Build common and pop-up menus into an application.
- Write an error-handling routine.
- Create an application by using the VB Application Wizard, and create, install, and remove a setup program.
- Use the data control to access a database table and discuss the features of an MDI environment.

## **Course content**

### **Lesson 1: Introduction to Visual Basic programming**

- What is Visual Basic?
- Terminology
- Steps to create an application
- Modular environment

### **Lesson 2: Building an application**

- Setting properties of objects
- Forms
- Introduction to controls
- Object-based, event-driven programming

### **Lesson 3: Coding**

- The Code Editor
- Using the Object Browser to view properties and methods of objects
- Statements and functions
- Conditional statements

- Looping statements
- Native code

#### **Lesson 4: Debugging**

- Overview

#### **Lesson 5: Forms**

- Showing and hiding forms
- Order of events
- Multiple forms
- Startup and end of applications

#### **Lesson 6: Variables**

- Data types
- Scope and lifetime of variables
- Constants
- Arrays and user-defined types

#### **Lesson 7: Procedures**

- Introduction to procedures
- Arguments and parameters
- Named arguments and optional arguments

#### **Lesson 8: Controls**

- Control formatting
- Standard controls
- Custom controls

#### **Lesson 9: Menus**

- Creating and coding menus
- Custom pop-up menus

#### **Lesson 10: Error handling**

- An introduction to error handlers

#### **Lesson 11: Wizards**

- The Package and Deployment Wizard
- Application Wizard

#### **Lesson 12: The next step**

- Data access using the Data Form Wizard and the data control
- MDI forms
- Classes
- An introduction to ActiveX controls within Visual Basic